THE JOURNAL OF SCHOOL HEALTH

VOL. XVII No. 7

SEPTEMBER

1947

PUBLISHED BY

THE AMERICAN SCHOOL HEALTH ASSOCIATION

AMERICAN SCHOOL HEALTH ASSOCIATION

Organized 1927

Devoted to the interests and advancement of those engaged in school health activities and the service rendered by them

Officers of the American School Health Association

President:
Walter Wilkins, M.D., Jacksonville, Florida

President-Elect:
David Van der Slice, M.D., Flint, Michigan

Vice-Presidents:
V. K. Volk, M.D., Saginaw, Michigan
Chairman, Membership Committee

Cyrus H. Maxwell, M.D., Albany, N. Y.
Chairman, Program Committee

Executive Secretary and Treasurer:
A. O. DeWeese, M.D., Kent, Ohio

Editor:
Charles H. Keene, M.D., Buffalo, N. Y.

GOVERNING COUNCIL

Term Expires 1947

Kenneth Gibson, D.D.S.
Detroit, Mich.

H. F. Kilander, Ph.D.,
New York, N. Y.

Paul Kinney, M.D.,
Altadena, Calif.

Howard Lundy, M.D.,
Seattle, Wash.

Guy N. Magness, M.D.,
University City, Mo.

Term Expires 1948

William A. Ayling, M.D.,
Syracuse, N. Y.

Sue Thompson Gould, M.D.,
Hudson, N. Y.

Lon W. Morrey, D.D.S.,
Chicago, Ill.

Anna Neukom, R.N.,
Binghamton, N. Y.

Arthur T. Turner, M.D.,
Chicago, Ill.

Term Expires 1949

Gertrude E. Cromwell, R.N.,
Des Moines, Iowa

Mildred Doster, M.D.,
Denver, Colo.

Paul Landis, M.A.,
Columbus, Ohio

L. A. Pequegnot, M.D.,
Toronto, Canada

L. M. Smith, M.D.,
Pittsburgh, Penn.

By special vote of Governing Council

Jay A. Myers, M.D.,
Minneapolis, Minn.

Past Presidents, Ex-Officio

C. Morley Sellery, M.D.,
Los Angeles, Calif.

S. B. McPheeters, M.D.,
Goldsboro, N. C.

Helen Ahrens Cary, M.D.,
Portland, Ore.

All other living Past Presidents

Affiliated Associations

Am. Ass'n Health, Physical Education, and Recreation.
Ben Miller, Washington, D. C.

Michigan Ass'n.
Bernard W. Carey, M.D.,
Director, Children's Fund of Michigan, Detroit, Mich.

California Branch A.S.H.A.
L. Velma Seanor,
Alhambra, Calif.

THE JOURNAL OF SCHOOL HEALTH

Vol. XVII SEPTEMBER, 1947 No. 7

CONTENTS

Preventing Childhood Maladjustment 177
Anita M. Mühl, M.D.

Eulogy — Donald S. Goudy, D.D.S. 186

Orthopedic Facts About Football 187
Harold E. Crowe, M.D.

Program: Atlantic City Meeting 190

Editorials 192

Abstracts and Notes 194

Reviews 205

Bibliography 206

Meetings 206

THE JOURNAL OF SCHOOL HEALTH

Published monthly, except July and August, at Buffalo, N. Y.
THE AMERICAN SCHOOL HEALTH ASSOCIATION
3335 Main Street, Buffalo 14, New York

Editor
CHARLES H. KEENE, M.D.
University of Buffalo, Buffalo, N. Y.

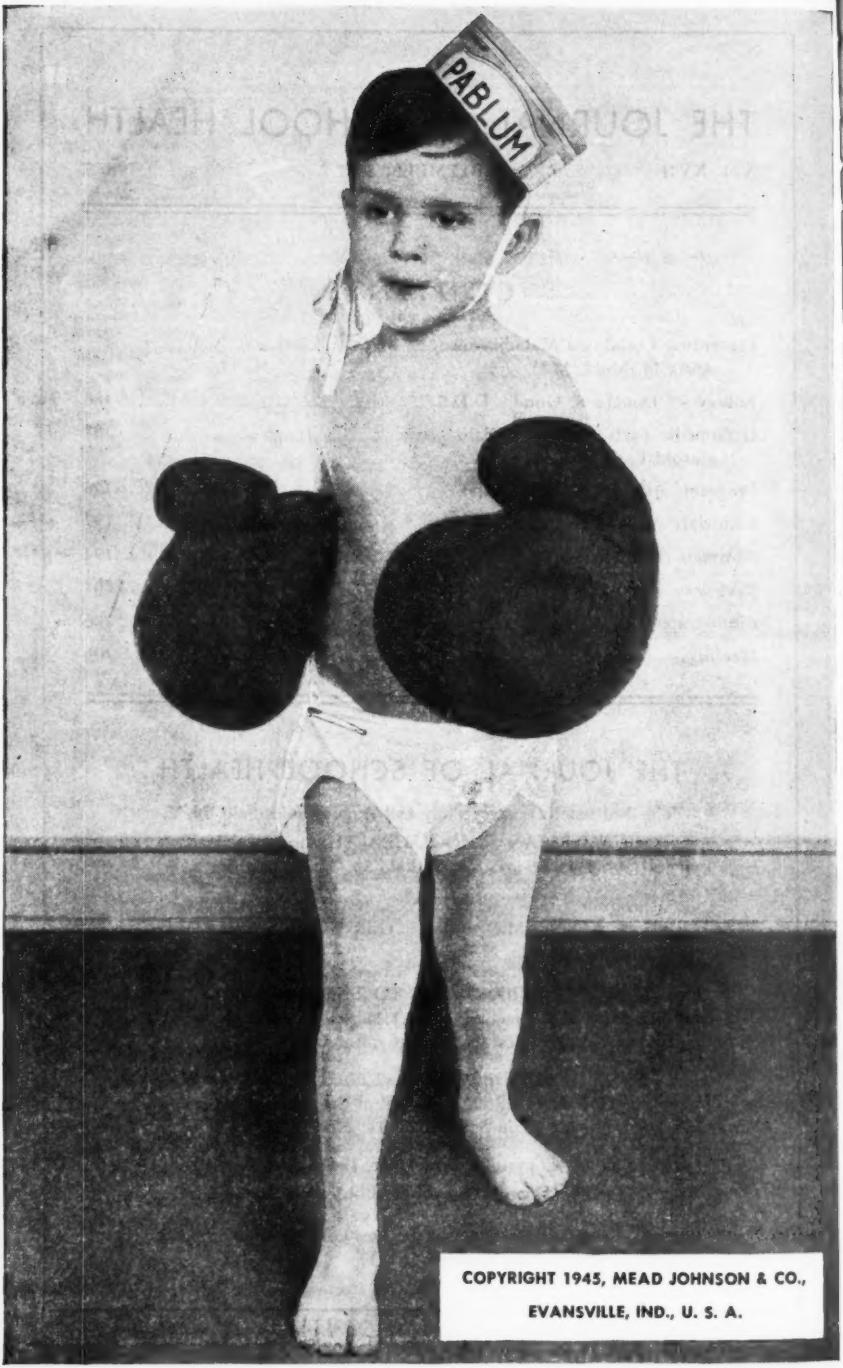
Assistant Editor
GERTRUDE E. CROMWELL, R.N.
Des Moines, Iowa

SUBSCRIPTION RATES TO THE JOURNAL
Membership dues, $2.00, including $1.75 subscription. Subscription $1.75
Single copies 25c, send payment with order

Address all communications to
THE EDITOR, The Journal of School Health
3335 Main St., Buffalo 14, New York

Copyright, September, 1947, by
The American School Health Association

Entered as second-class matter at the Post-Office at Buffalo, N. Y.
October 5, 1937


PABLUM
COPYRIGHT 1945, MEAD JOHNSON & CO.,
EVANSVILLE, IND., U. S. A.

THE JOURNAL OF SCHOOL HEALTH

Devoted to the interests and advancement of school health service and instruction. Your participation by membership is solicited.

Vol. XVII SEPTEMBER, 1947 No. 7

PREVENTING CHILDHOOD MALADJUSTMENT *

ANITA M. MÜHL, M.D.

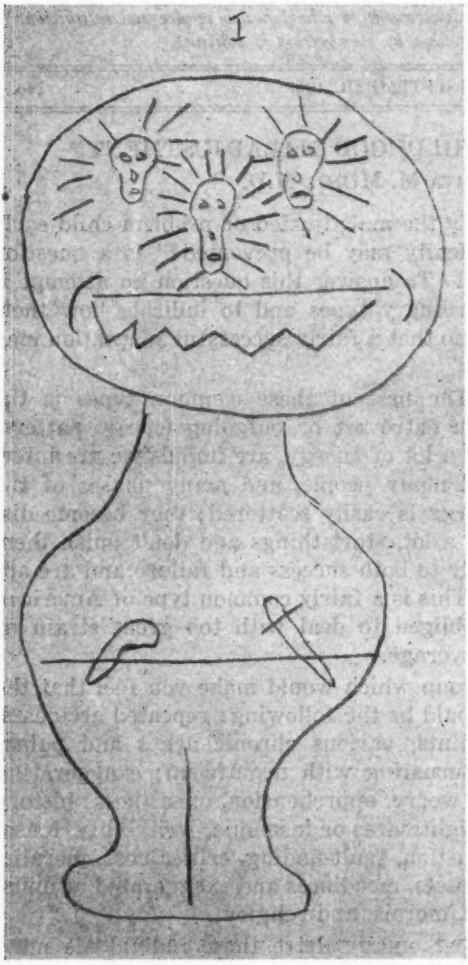
"How can we identify the maladjusted or problem child early enough so that real difficulty may be prevented?" is a question often asked by educators. To answer this question an attempt is made to present some ordinary types and to indicate how their behavior can be modified so that a fairly successful adaptation may be assured.

The Active Type—The first of these common types is the Active Type based on an extrovert or outgoing energy pattern. These individuals expend a lot of energy, are impulsive, are interested in many activities, many people, and many phases of the environment. Their energy is easily scattered; they become distractable, talk and laugh a lot, start things and don't finish them and react over-emotionally to both success and failure and are apt to have ups and downs. This is a fairly common type of American individual. When not obliged to deal with too great strain or stress, the adaptation is average.

Symptoms in this group which would make you feel that the individual needed help would be the following: repeated accidents, somatic (bodily) complaints, various chronic aches and pains; marked suggestibility alternating with negativism; exaggerating anxiety reactions such as worry, apprehension, uneasiness; history of poor sleeping habits, nightmares or insomnia, irritability, tenseness and periods of exhaustion, fault-finding, criticalness, moralizing, impatience, temper upsets, moodiness and exaggerated or unusual interest in philosophy, morals, and religion.

Because of their great energy drive these individuals must have plenty of purposeful activity directed toward a goal. Due to their impulsiveness and distractibility they need to learn to plan practically and to stick to the job until the plan is carried out, thus developing both assiduity and responsibility. They should be encouraged in maintaining independence and in developing a sense of perspective toward pleasant and unpleasant stimuli to which

* Reprinted from the Los Angeles School Journal, April 1947, page 4.



THE ACTIVE TYPE

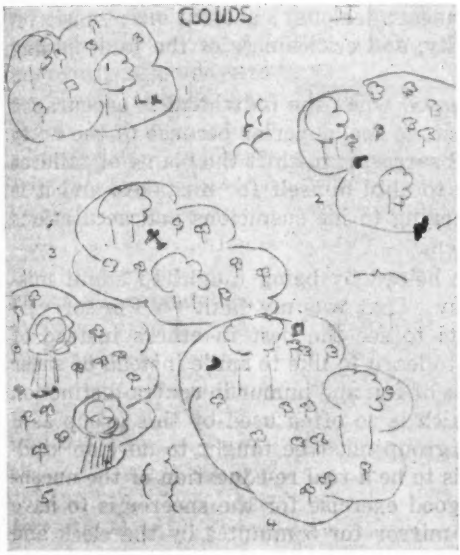
A very active child, age 6, with recurring night terrors, nightmares and marked day fears. Asked to draw the nightmare he drew "A SPOOK." Having drawn it he said it came into the room. The mother remembered that the grandmother on Halloween two years previously thinking to amuse the child had stuck some knives in her belt and held a lighted pumpkin in front of her head and had entered the child's room. He had screamed with terror. They had not recognized the relationship between his "Spook" nightmare and the Halloween performance. Having the child draw a bunch of spooks and explaining the situation to him cleared the night and day fears.

they over-respond emotionally. Above all they should be helped in developing self-discipline by having all activities directed toward a goal which the individual is helped to attain (not hounded or nagged to do).

The Non-Active or Quiet Type—The Non-Active or Quiet Type is often referred to as a shut-in type and is introverted in character. These individuals are shy and reserved. They do not go in for activities and competitive sports and so are often called lazy. They love to day-dream and indulge in phantasy, thoroughly dislike big groups of people, being happier with just one or two congenial souls. They are sensitive to ridicule, their feelings are easily hurt, and if they feel repulsed or rejected, they protect themselves by withdrawing within themselves and shutting their emotional doors. This again is a normal type, but being a minority group in the United States is looked down on by the Active Type.

Accentuated symptoms in this group which would make you want to find help for this individual would be an increased tendency to want to be alone—wanting to stay indoors all the time; loss of interest in appearances; increased daydreaming; increasingly poor concentration and poor performance, fatigue, lack of energy, tendency to depression, loss of ambition, and taking a long time to answer questions or to finish a given task.

In this type anything that encourages the daydreaming or the tendency to stay indoors; any insistence of "now if you will just put your mind to it you can finish that"—or any nagging about the apparent lack of interest in appearance will only intensify these symptoms.



INACTIVE (QUIET) TYPE

Took 2 hours to write 2 pages. Pauses of 10 seconds to 10 minutes between words. Was not asked to hurry. Drawing took more than 1 hour. Serious emotional blocking with withdrawal from school groups—staring off into space—failure of work in school. The clouds had trees and flowers. This is what she wrote about it:

"As I looked out of the window I saw clouds floating by. As I watched I dreamed I was up there sitting in the shadow of a tree. The wild flowers were growing all round and on each cloud there was some sort of toy. The sun was shining and birds flew by singing as they went. It was lovely to be away from worries and a scolding mother because I did not make my bed. I forgot for the moment about being at home when all of a sudden my brother came in and gave me a punch so that was goodbye to that dream."

She was on 5 under the tree. After several drawing sessions she admitted that the "toy" on 2 was a gun and the 2 objects on 4 were a body and a tombstone. This brought out the emotional conflict which was causing exaggerated shut-in type of behavior which was causing her unhappiness. It was a very intelligent teacher who noted these early symptoms and who cooperated to the fullest in carrying out the suggestions with regard to the drawing.

To help these children it is necessary to exteriorize the daydreams and phantasies in some form of activity acceptable to the individual; to find social outlets which are not too demanding but which will provide a stimulus for more interest in appearance. These individuals should be encouraged to take part in non-competitive mild activities such as walking, to start with, and later skating, swimming, interpretive dancing, and tap dancing. These people need to have the environment expanded and the interest in it developed. Most

especially should this group have good physical examinations with blood count and a B.M.R. (basal metabolic rate) as in this group one is apt to find a low metabolism, low thyroid activity, and a low blood count.

The Suspicious Type—A third type which should be watched as a potential problem is the supicious type. The early trends are easily recognized and if they can be corrected in childhood many people are saved a lot of unhappiness. Among the characteristics are a tendency to sullenness; of shifting the blame on others; pouting; suspiciousness; selfishness; jealousy; accusations; sensitiveness; intolerance; irritability, and criticalness of the fault-finding variety.

These trends are increased when the individual is encouraged to feel discriminated against; to feel superior because of the witty and barbed criticalness and sarcasm; to shift the blame of failures and misdeeds on others or to alibi himself for mistakes, and it is especially increased by listening to his suspicions and accusations and encouraging him in them.

These children can be helped by being taught to admit mistakes easily; to learn to say "That was my fault"—"I'm sorry; I was wrong"—and mean it; to see the best in others instead of always looking for faults; to learn to like to smile instead of sneer —to learn to develop a sense of fun and humor in contra-distinction to the sharp biting wit which is so often used by this group as a defense mechanism. This group must be taught to develop kindness and patience if there is to be a real re-education of the unconstructive trends. A very good exercise for the sneerer is to have him sneer at himself in a mirror for 5 minutes by the clock and then set and prop up the corners of his mouth for 10 minutes by the clock. The child is generally much amused and a week is often enough to correct the sneering expression. The person suggesting the exercise must be absolutely free from criticalness, sarcasm, and ridicule to be able to make it work. Unless it is fun, it doesn't work.

The Pre-hysterical Type—The fourth type is not so easily recognized. It is the loosely integrated emotional type which can also be called the pre-hysterical type. In this type of individual there is an extraordinary fluctuation of response as well as exaggerated response.

The personal element in all living is over-stressed, over-evaluated, and over-emphasized. There is an innate tendency to dramatize every situation and to be its leading actor, holding the center

of attention and having the spotlight focused at all times on the central character. These individuals try to evade all unpleasantness, difficulty, and responsibility. They crave commendation, appreciation, and recognition.

This type of child has a marked tendency to whine, coax, and complain; to weep or throw a rage, whichever way he thinks he can gain his end. Most of these children for some reason are attractive looking. They are often the product of faulty discipline, having at one time too much, too severe discipline and at other times too little control and too much pampering. These individuals are overly responsive to emotional strains and shocks and if they are subjected to repeated frights, often develop amnesic blocks with later panic reactions. Over-protection and taking all responsibility away is very bad for such children.

PRE-HYSTERICAL TYPE

A typical twelve year old nuisance in school and at home. Demanding attention, wishing to be the center of the stage at all times. Spontaneous drawing indicated marked talent. Drew enough to have a "one man show" at the Recreation Center and received real recognition. Continued with art work.

These individuals can be helped in a number of ways. They should be taught to face difficulties and unpleasant situations. They should, if possible, be removed temporarily to a quiet environment—some pleasant place in the country. Above all they need consistent training and discipline—not too severe and not too lenient. They need, too, a goal idea and help in planning for being successful in attaining it. All training should be, as far as possible, systematic, impersonal, friendly, casual, and unemotional. An intelligent child can always see, if one presents the idea properly, that it is too demanding in its wish for praise and that it is too keyed-up in its reaction.

The best outlet for the fourth type is *dramatics*—writing, plays, acting in them and directing them and one can not begin too young. They have an almost limitless phantasy and they like to work with it. As long as the phantasy is exteriorized in a con-

structive manner it is entirely helpful and helps to tighten up the loose integration which otherwise exists.

The Jealous Type—The fifth type is rarely mentioned but is one which needs discussing badly. This is the Jealous Type. Jealousy is a selfish response with an unpleasant emotional tone which is produced when the individual feels thwarted in getting something he wants. This feeling of being thwarted, generally carries with it a sense of rejection. The something he wants may be affection, attention, a job, power, or possessions—in other words, it may be animate or inanimate—concrete or abstract.

Transient jealousy between the age of 1 and 5 years is a normal reaction in most children where it flares up and dies down quickly. If however, the jealousy becomes a conditioned emotional response, it has a very unhealthy and warping effect on the personality. While jealousy is often found in the suspicious type, it is not always an integral part of this type.

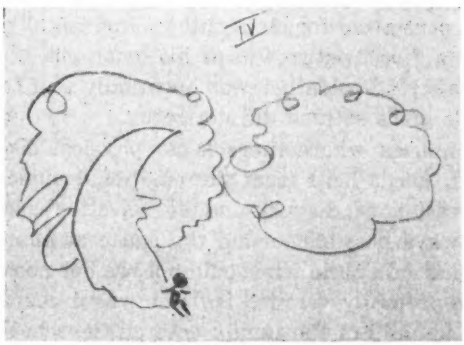
No person who is jealous is ever proud of it—therefore it lowers self-esteem and leads to a feeling of shame and guilt. If the individual is recognized as such, it is not at all welcome; therefore the individual tries to do something about it and in 99 cases out of 100 generally does the wrong thing. He either refuses to admit the possibility that he could be jealous and projects the jealousy onto someone else (probably the person he is jealous of) saying that person is jealous of him, or tries to justify his jealousy by elaborate explanations and self deception. Jealousy is generally tied up in the unconscious with a strong feeling of possession, selfishness, anger and hatred, and it stimulates these trends constantly.

The symptoms of the jealous type are varied. The jealous child according to his psychological make-up either attempts to retreat or to re-establish himself. If he retreats, he may become shy and diffident; discontented, fretful and irritable; fatigued, nauseated and weak; or he may become just desperately unhappy and develop a martyr complex. If he attempts to re-establish himself without insight, he will show signs of anger, resentment, rebellion, discontent. There is often irritability in play with derogatory remarks made about others. He tries to praise himself and his marked feeling of inferiority is often disguised as a conscious superiority with a dominating manner. He may sulk, quarrel, refuse to eat, feign sickness, wet the bed to gain special attention, or build up phantasies in which the object of jealousy is at a disadvantage.

What can one do to help such an individual? Plan group activities in which effort is praised as well as accomplishment. Help the individual learn to share spontaneously and to respect the rights of others. See that the child is not teased by adults and that adults do not try to make the child jealous. Be impartial and give judicious praise and recognition for effort well directed. See that the task given the individual is within range of accomplishment. Discuss jealousy in an impersonal way with the child.

Because jealousy is the cause of so much unrecognized conflict throughout life; of so much discontent, bitterness, secretiveness, misery and resentment, this trend should be recognized in childhood and be cleared up satisfactorily. This is easy to accomplish in the first ten years—if it goes on, it becomes more twisted and deeply rooted so that in adult life it is very difficult to eradicate.

Psychosomatic Disturbances—Of course there is no need to mention the more obvious disturbances, but it may not hurt to list them. Convulsions of course mean medical care at once. Tics, grimacing, nailbiting, habitual thumbsucking (persistent beyond the third year), bedwetting, soiling or compulsive behavior of any kind all need attention. Someone has said that persistent bedwetting, thumbsucking and poor sleeping habits indicate lack of developing emotional discipline and are the forerunners of a later neurotic disposition. These conditions are transitory in many children, but it is the persistence of the behavior that makes it worth considering.



"THE MAN THAT SAT ON THE MOON"

Delinquency due to malnutrition. He wrote about this picture:

"The man which sat on the moon was very hungry one day, and was wondering where he'd get some. All of a sudden a gust of wind blew him off, and, flying through space thinking it being the last, when he felt a bump, then found himself on a plane it landed safely then he ran away and said 'No more airplanes for me'."

Asked if the man finally got something to eat—he said "No—he just had to go hungry."

He was sent to a Children's Rest Home in the mountains and when he returned was placed in an environment where he would have adequate food. His behavior became quite normal and stealing stopped.

The important thing for teachers and school physicians to recognize is that many of the physical states encountered have large emotional components. If these children are to be really helped, they need not only to have the

physical symptoms treated, but they should also have an opportunity to clear up the underlying emotional states.

The most common disorder with a large emotional element is asthma. All asthmatics have marked anxiety reactions and clearing up the asthma per se does not make the patient a well person. If the asthma alternates with eczema the problem is more intensified. In getting the history of a delinquent boy, the mother said that the younger child, a girl, had serious attacks of asthma alternating with eczema. When the mother was asked if she would be willing to have the child come to the clinic, she exclaimed, "but the girl's a good child, she doesn't give any trouble." However she brought the little girl who told about the home. She said the father was drunk a lot, was violent and abusive when he was drunk. Later she said she was always sick when her dad was home. Asked if she had asthma or eczema when her father was away, she said no. The mother confirmed this and seemed very surprised that it was so. The child was sent to a rest home in the country for six weeks and she had not a single attack while there. The first day she was home the father came in drunk and she had a violent attack. The situation was explained to the mother who arranged to have the child sent away for six months. Incidentally, the boy's delinquency was a direct outgrowth of his emotional reaction to the father's brutality. The father was eventually sent to an institution and the little girl's asthma did not recur.

Persistent recurrent nausea where there is no physical disturbance to account for it, needs help from the emotional angle. Nausea is often an expression of disgust and of rejection and revulsion and it is not always possible to find the cause at once. One interesting case was that of a child who could not eat her noon meal at school because she promptly vomited it. She was excused from eating. Then a second child of the family entered the school with the same behavior. On investigating it was found that the mother helped in the school kitchen at noon. She was a cheerful, jovial soul who when interviewed stated that it was nothing to worry about because she was always nauseated for months when she was pregnant and she always got over it. When asked when the oldest child developed the nausea and vomiting she said, "You know it's the funniest thing but she was all right until the next child was coming and then she began to vomit." However the child didn't stop when the mother did, but kept right on. The

second child was perfectly all right until the third child was on its way. Then *she* started. She had not copied her sister but she did copy the mother's behavior and, like the sister, she didn't stop either when the mother did.

The children were sent to the mountain home maintained by the Free Kindergarten and the mother was removed from the school kitchen. The children could eat perfectly and had no nausea while in the mountains. When they returned they were able to eat at school but not at home. It took some explaining to get that family to see what was wrong and to re-establish the emotional equilibrium. When last heard of, all the members of this family were eating heartily and keeping their food down.

Other physical conditions which should automatically be checked for emotional involvement are any marked variations of weight or size; noticeable endocrine disturbances; dietary insufficiency and malnutrition. The very tall, thin child or the very short, fat child is often the object of ridicule. If these children haven't grown any emotional duckfeathers they are apt to feel badly whether they show it or not and they are apt to develop marked feelings of inferiority for which they may overcompensate by very aggressive behavior.

Exteriorizing the Emotional Content—In conclusion it may be said that drawing (not art work as such!) may be an excellent outlet for all of the types.

The object of the drawing is to exteriorize the emotional content and to objectify it in such a way that it loses its power to impair the individual's capacity for adjustment. It is not always necessary that the child understand the symbolic content of the drawing. *The motor effort producing a concrete expression* (whether drawing, writing, modeling, etc.) is often quite enough.

With regard to the drawings the following suggestions may be helpful:

1. All drawing should be done without any direction with regard to technique.
2. One may say—"draw something imaginary" or "draw anything you like—or "make a picture of your nightmare" *but do not tell them how to do it.*

Crayons are usually acceptable but if the child prefers a pencil, let it use a pencil. If a child says, "I can't draw anything imaginary (or make believe)—I don't know how" you might suggest

what the writer did in one case and say—"Draw what you think an imaginary picture would be like if there were such a thing as an imaginary picture"—it produces results. *Health Education Journal*, Los Angeles City Schools, April, 1947.

Anita M. Mühl, psychiatrist, is a distinguished teacher and writer. She holds an M.D. from Indiana University and a Ph.D. from George Washington University. She was Chief of the Division of Special Education, State of California, 1927-29; lecturer in Psychiatry and Criminology, University of Melbourne, Australia, 1939-42. She is a Fellow of the American College of Physicians and a member of the American Psychiatric Association. She is the author of numerous books and articles on psychiatry, criminology, and education. Following a talk on this subject to staff physicians of the Los Angeles City Schools she was asked to write a paper for teachers. This article is the result.—Ed.

Donald S. Goudey, D.D.S.—Dr. Donald S. Goudey became a member of the dental department of the Los Angeles City Schools in January 1930. His skill as a dentist, his high ideals, and his devotion to his life work of service to children soon won the high esteem of all his associates. On July 1, 1942, Dr. Goudey was appointed supervisor of the dental department, a position he held with distinction until a short time before his death on April 17, 1947, at the age of 41.

Dr. Goudey's great ambition was to further dental health education and services for all our children. In 1946, when the reparative dental program in the Los Angeles City Schools was discontinued, Dr. Goudey labored long hours, days, nights, and week-ends working with the dental profession and the health agencies of the community, more especially the Parent-Teacher Association, in an effort to establish a system of school dental service which would preserve the values of private dental practice and at the same time secure adequate care for the needy school children.

It is a great loss of our community that Dr. Goudey was taken away at the height of his achievement. However, the work has been started and will go on as a memorial to his devotion both to his profession and to the welfare of children.

C. Morley Sellery, M.D.

ORTHOPEDIC FACTS ABOUT FOOTBALL*

HAROLD E. CROWE, M.D.

Growing boys of high school age are sometimes injured permanently on the football field or the basketball court. These injuries can be prevented. An eminent orthopedist sounds a timely note of caution.—Ed.

Modern civilized man leads a very different life from that of his original forebears who came into existence two or three million years ago. That early human who walked barefoot, grasping the earth with his feet, did not suffer from corns or bunions. Even among present-day races such as those seen in Malaya and India it is interesting to note that many feet are slender, high-arched, and graceful. These people never wear shoes, largely because they never could afford to buy a pair of shoes.

These same people also have relatively little difficulty with joint troubles because they live more nearly like the original man. When they sit down they sit on the ground or on their heels. When they lie down they lie on the firm surface of the earth with relatively little padding to permit chronic back strain during their hours of rest.

Our feet are placed in heavy splints from the time we commence to use them so that the grasping action of the feet is rarely called for. In girls and women the high heels commonly worn require that the foot be used for weight-bearing on tip-toe which of course was not the original idea at all. We rarely get closer to the ground than the seat of a chair and our beds are much softer than those made by a few branches spread on the ground. Our present civilized mode of life seldom requires us to carry our joints, especially those of the spine and the lower extremities, through their full range of motion.

Our dietary habits also are very different from those of aboriginal man. Primitive man ate grains that were not refined and divested of their vitamin, mineral, and protein content. The sugar he consumed must have come largely from native sweet plants or honey. His meat, of necessity, must have been eaten raw.

Aboriginal man knew not the modern devices that shield us from the life-giving rays of the sun, such as walls and roofs, window glass, and clothing. All these profound changes in living habits have certainly contributed to the fact that modern man's offspring is more subject to disturbance in growing bones than was the child who grew up in a state of nature. Many high school boys

* *Health Education Journal*, Los Angeles City Schools, April, 1947, p. 12.

and girls who are growing rapidly just can't take the stresses and strains that strenuous athletics involve.

In an institution such as the Los Angeles Orthopaedic Hospital, where crippled children accumulate, we have occasion to see a great many disturbances in the growing portions of the long bones. These consist of osteochondritis of the epiphyses—which is medical shorthand for inflammation of bone and cartilage in the growing ends of the bones—and slipping of the weight-bearing epiphyses, which means a displacement of the ends of long bones carrying weight before the cartilage joining the end and the shaft has become completely ossified. (This occurs about the twentieth year.) These disorders appear with surprising frequency among fat children, usually considered to be suffering from some sort of endocrine disturbance. This is so true that we habitually regard these youngsters as endocrine cases. In about half of the children this is true but the other half may be relatively normal in physical build and only potentially fat because they have not become addicted to an excessive carbohydrate diet. It is a common practice for children to spend their lunch money on a hot dog sandwich and a coke—obviously an inadequate source of nutrition. This is no worse than the doctor's habit of lunching on doughnuts and coffee but such a practice does more harm to the growing child.

When such a boy grows to an abnormal height and weight he catches the eye of the football coach. He is slow and clumsy and can't run with the ball but his mass makes him useful for defense in the center of the line. The school doctor may feel that such a boy is especially prone to injury but he must sometimes contend against the coach, the sports writers, and often against the father, the "old grad", who cut quite a caper in his school days and who thinks that if his boy doesn't do the same, his name will be forever disgraced. What avails the word of a mere doctor against the tradition of gridiron glory?

Perthe's disease and slipping epiphysis in the head of the femur, or thigh bone, are typical results of trauma in football and other strenuous competitive sports, and both are likely to lead to permanent disability. So these youngsters who might have become stars in college athletics are instead permanently crippled and, even worse, are unable to lead a normal life.

Since no definite evidence of infection has ever been adduced to explain the onset of these diseases and since the disturbance nearly always seems to be related to a change in the circulation in the joint, we believe that excessive muscular strain is responsible.

It should be borne in mind also that trauma may be exerted even by normal activities where the bone is not strong enough to withstand the forces applied by the weight or muscular development of the adolescent.

The substitutes for football should obviously be the training of these youngsters in sports where excessive weight or blows can be avoided while at the same time they are learning skill, grace, and speed. These are the qualtities which would enable them to become football stars of considerable note in college, even after a relatively short period of training, if they have maintained normal skeletons and normally flexible and movable joints.

The value of competitive sports and especially sports involving team-work is undoubtedly of great importance to any boy from the point of view of his social adjustment and consequently the value of such athletic activity cannot be overlooked in the consideration of the training of a youngster for future adjustment to life with other people. However, it is also true that all great athletes do not turn out to be the best citizens. It seems very possible that the elements of fair play, good sportsmanship, and the matter of team-work with shared responsibility, even though the other man gets the honor, can be taught in other activities such as tennis, swimming, handball, badminton, track, and sports which will not overtax the physical strength of the child prior to the time his bones are sufficiently mature to maintain the load.

It has been my feeling for a long time that adoption of a program of this type might ultimately turn out many finer college athletes as the years go by because of the fact that the capable future athletes have been preserved for their college years who are now crippled during the activities of their high school period of life.

Certainly, any child who is found walking with a slight limp that is relatively painless and without a definite explanation should be excluded from all sports until a definite diagnosis and explanation of his limp has been made. Such a rule could easily obviate a great many serious athletic injuries.

The tough and sturdy offspring of early man might have played football and basketball with impunity if there had been anybody around to teach them the rules; but the children of modern Homo sapiens, who have got pretty far away from nature, need to be selected for these sports with expert care.

AMERICAN SCHOOL HEALTH ASSOCIATION ANNUAL MEETING, ATLANTIC CITY

October 5th, 6th, 8th and 9th, 1947

Sunday, October 5, 1947—

2:00 P. M., FIRST GENERAL SESSION, *Garden Lounge, Hotel Dennis*

Presiding—WALTER WILKINS, M.D., *President.*

1. *The Use of Certain Foods in the Prevention and Treatment of So-called Nutritional Anemias in Florida*—RUTH BLAKELY, Director of Field Studies, Nutrition Investigations and Services, State Board of Health, Jacksonville, Florida.
2. *A New Approach to Education in Tuberculosis and Tuberculosis Control n Schools*—J. A. MYERS, M.D., Universty of Minnesota, Minneapolis, Minnesota.
3. *The Spastic Child and the School*—WINTHROP M. PHELPS, M.D., 3038 St. Paul Street, Baltimore, Maryland.
4. *B.G.G. Vaccination of School Children in Norway*—CONRAD BIRKHAUG, M.D., New York State Department of Health, Albany, New York.

7:30 P. M., SECOND GENERAL SESSION, *Garden Lounge, Hotel Dennis*

Presiding—CHARLES H. KEENE, M.D.

1. *Age Incidence of Defects in School Children*—CYRUS H. MAXWELL, New York State Department of Education, Albany, New York.
2. *The Use of Iron in the Prevention and Treatment of So-called Nutrition Anemia in School Children*—WALTER WILKINS, M.D., Director Nutrition Investigations and Services, State Board of Health, Jacksonville, Florida.
3. *Sex Education in Tomorrow's Schools*—HARRIETT B. RANDALL, M.D., Head of Personned Health Unit, California Public Schools, Los Angeles, California.
4. *What is News?*—E. R. VAN KLEECK, Ph.D., Assistant Commissioner of Education New York State Education Department, Albany, New York.

Monday, October 6th, 1947—

Hotel Dennis

9:00 A. M., THIRD GENERAL SESSION, *Garden Lounge,*

Presiding—WALTER WILKINS, M.D., *President.*

1. *The Administration of the Conservation of Hearing Program in a Full Time Health Unit*—EMILY A. PRATT, M.D., Head of Conservation of Hearing Section, Washington State Department of Health, Seattle, Washington.
2. *The Wetzel Grid*—FRANCIS X. MARX, M.D., Board of Education, Oneonta, New York.
3. *An Evaluation of School Health Services in Public Health*—L. M. SMITH, M.D., Medical Director, Child Health Service, Pittsburgh Public Schools, Pittsburgh, Pennsylvania.
4. *The New York City Plan for Health Teaching in the High School*—FRANK J. O'BRIEN, M.D., Associate Superintendent of Schools, New York City, New York.

Wednesday, October 8th, 1947—

6:30 P. M., DINNER SESSION,* . . . . . .

Presiding—WALTER WILKINS, M.D., *President*

Presentation of the William A. Howard Award to HELEN A. CARY, M.D., Portland, Oregon.

Response—HELEN A. CARY, M.D.

Dinner Speaker—DR. WILLIS A. SUTTON, Superintendent of Schools Emeritus of Atlanta, Georgia, and Guest Lecturer of the *Readers Digest*—"*Health and the Learning Process.*"

Thursday, October 9th, 1947—

9:00 A. M., JOINT SESSION,

American School Health Association and the Dental Section American Public Health Association

Presiding—WALTER WILKENS, M.D., *President,* and WALTER J. PELTON, D.D.S.

1. "*Materials and Methods in Dental Health Teaching in Schools*"—MISS MARY BOWEN, Supervisor of Health Teaching, Board of Education, Syracuse, New York.
2. "*The Educational Approach of the School Dental Hygienist*"—MISS MARGARET JEFFREYS, State Board of Health, Dover, Delaware.
3. "*The Provision of Dental Care by the School and by the Family Dentist*"—DR. E. H. JONES, Public Dental Service Society, Cincinnati, Ohio.
4. "*The Part of the State Health Department in the School Dental Program*"—DR. J. M. WISAN, Dental Director, New Jersey State Board of Health, Trenton, N. J.
5. "*The American Dental Association's Teaching Policy in the School Health Program*—GLENNA G. WALTER, Health Education Consultant, Board of Public Relations, American Dental Association, Chicago, Illinois.

***Tickets may be purchased at Registration Desk, American Public Health Association.**

EDITORIAL STAFF

CHARLES H. KEENE, M.D., *Editor*
University of Buffalo, Buffalo, N. Y.

GERTRUDE E. CROMWELL, R.N., *Assistant Editor*
Des Moines, Iowa

EDITORIAL BOARD

WILLIAM E. AYLING, M.D.
Director of School Health Service, Syracuse, N. Y.

HELEN A. MARTIKAINEN
Health Education Consultant
U. S. Public Health Service
Richmond, Va.

S. B. MCPHEETERS, M.D.
Director, Public Health
Wayne County Health Dept.
Goldsboro, N. C.

J. A. MYERS, M.D.
University of Minnesota
Minneapolis, Minn.

FREDERICK L. PATRY, M.D.
Psychiatrist
Formerly State Dept. of Education
Albany, N. Y.

C. MORLEY SELLERY, M.D.
Director, Health Service Section,
Public Schools, Los Angeles, Calif.

CLAIR E. TURNER, DR. P.H.
Assistant to President, National Foundation for Infantile Paralysis,
New York, N. Y.

EDITORIALS

The article on BCG republished in this issue* from *California Health* is a sane presentation of the subject. BCG was originally used by Calmette in 1912 in an attempt to protect cattle against tuberculosis. Since that time large numbers of animals, particularly guinea pigs and cattle, have been employed to test the efficaciousness of this organism. When BCG is introduced into animals and they are later infected with measured doses of virulent tubercle bacilli, the disease does not progress quite as rapidly as in other animals. Nevertheless, if the vaccinated animals are permitted to live sufficiently long they all fall ill and die from tuberculosis. In the United States and Canada the veterinarians gave BCG the acid test in their large tuberculosis control programs among cattle. It was found that those animals which received BCG subsequently developed just as much tuberculosis as the controls when the two groups were subjected to the same exposure. Therefore BCG was discarded, and the veterinarians continued with their methods of control based on fundamental principles and have almost eradicated tuberculosis from the cattle herds.

Despite the fact that approximately seven million people in different parts of the world have had BCG administered since 1920, there is no convincing evidence that it is sufficiently effective adequately to control tuberculosis. While some authors have claimed

* Page 194.

a considerable degree of success, other equally good workers have found BCG to be totally inefficacious. Therefore, despite the fact that this substance has been in use for more than a quarter of a century, it is today a highly controversial subject.

Under the direction of Dr. H. E. Hilleboe, Assistant Surgeon General of the United States Public Health Service, and his co-workers, a conference was held on BCG in Washington on September 7, 1946. Among those present it was the consensus of opinion that while a large volume of work has been done on this subject, in all the world's literature there has not appeared a report of a study that has been adequately controlled over a sufficiently long period of time to justify final conclusions. It was strongly recommended that the Tuberculosis Control Division of the United States Public Health Service conduct thoroughly controlled but limited studies over a sufficiently long period of time to establish facts regarding the development of tuberculosis among persons to whom BCG has been administered. The Tuberculosis Control Division of the United States Public Health Service is already engaged in conducting these studies. Until they have been completed and conclusions drawn, the administration of BCG by others must be regarded as experimental.

The general use of BCG in this country could set the clock of tuberculosis control back by twenty-five to fifty years. Excellent progress is being made in controlling tuberculosis in this country by fundamental methods with unquestioned efficacy. The administration of BCG completely nullifies the tuberculin test as a diagnostic and epidemiological agent. Thus, our best agent in the fundamental program would be lost. At the present moment that person would seem to be wise who refrains from recommending or using BCG, at least until the studies now in progress by the United States Public Health Service are completed. This will require many years.—*J. A. M.*

* * * * *

The June 1947 issue of the American Journal of Public Health carries a very interesting symposium and editorial on the topic, "What Is Health Education." Confusion is evident. Some of those participating consider it to be almost entirely health information only, others include health services. It is a pity that there is not more definitive thinking.

To most of us Health Education means Health Training and Instruction.

Confusion has arisen, and has been fostered, by a report issued several years ago by a special committee of a national association

which included in the term Health Education the whole School Health Program. Few leaders in the field of health training and instruction and almost no public health authorities have this concept.

Let us limit the term Health Education to that only.—*C. H. K.*

* * * * *

ABSTRACTS

Role of BCG in Tuberculosis Control Still Uncertain,—The most recent addition to the list of drugs, chemicals and modern "miracle" preparations which are being brought to public attention, is the tuberculosis vaccine known as "BCG."

BCG, an abbreviation for Bacillus-Calmette-Guerin, was first prepared by Calmette and Guerin in Paris in 1920. Since that time it has been widely discussed and undergone numerous experimental studies.

Although the vaccine has been used extensively in Scandinavia and studies are being conducted in the United States, exactly how, when, and if this vaccine should be used is still a controversial topic. In June of 1946, the Tuberculosis Control Division of the U. S. Health Service reported in an editorial in *Public Health Reports*,[1] "Careful review of the voluminous literature on the subject since 1920 fails to reveal irrefutable evidence of the vaccine's effectiveness."

BCG is prepared by reducing the virulence of bovine tuberculosis bacillus by special cultural procedures. Its proponents say that when introduced into tuberculosis-negative (reaction to tuberculin test) infants and children, the attenuated organisms of the vaccine initiate a self-limiting infectious process which rapidly produces a variable degree of resistance against virulent strains of bovine and human tuberculosis.

Opponents of BCG claim that there is danger in the procedure of deliberate imposition of infection, no matter how benign. They insist that the induced infection does not give suffcient immunity. This group also points out that persons who have been infected early in life are those who die later in life.

With this divergence of opinion in scientific circles, it is easy to see how popular articles presented to the general public on the subject can often be misleading in their implications. Typical of the misconceptions which arise are the many letters currently being received by the U. S. Public Health Service from tuberculous patients asking where they can get BCG vaccine. "Usually," the Public Health Service reports, "hopes of a cure have been kindled

by a newspaper story on BCG. The press releases are not always inaccurate but are often misleading to the layman. The U. S. Public Health ServiceTuberculosis Control Division is answering these letters with care, explaining that BCG is now under intensive study in this country, that the vaccine is never administered to persons who are reactors to tuberculin, that BCG tends to heighten resistance to tuberculosis, and that it is *not* a cure for the disease."

Although it is apparent that no general agreement regarding the use of BCG in the United States has yet been reached, the following statement by Pope and Chadwick[2] seems to be a good summary of the majority of present authoritative opinions on the subject:

"With the present low level of tuberculosis in the United States, it is unlikely that immunization of the general public is a practical procedure. However, in groups exposed to special risk, as student nurses, or groups with particular susceptibilities, as American Indians or patients in mental hospitals, vaccination *may* be an effective means of controlling the morbidity and mortality of the disease."

Attempts at evaluation of the use of vaccine are now being made by the U. S. Public Health Service in a group of well controlled studies. From California's Health, California Dept. Public Health, April 15, 1947.

[1]Editorial, "BCG Vaccination Against Tuberculosis," *Public Health Reports*, LXI (1946), pp. 801-802.

[2]Chadwick, Henry D. and Pope, Alton S. *The Modern Attack on Tuberculosis*, New York: Commonwealth Fund, 1946.

* * * * *

Keeping Schools Open During a Polio Outbreak.—The logical and reasonable procedure of keeping schools open during an outbreak of poliomyelitis is well exemplified by Sheboygan's action during the serious incidence of this disease in 1946. Quoting from the Annual Report of that city's Department of Public Health, with the permission of Dr. G. J. Hildebrand, Health Commissioner:

"In this country the epidemic of infantile paralysis was the largest since 1916. In Sheboygan, 30 cases were reported, 25 of which had some definite paralysis. The outbreak began toward the end of July and continued through October with the largest number of cases occurring in September.

"While a number of cases had occurred during July and August it was decided not to postpone the opening of school. It was also decided not to close any schools or grades if other cases occurred. In adopting this program, the recommendation of the National Foundation for Infantile Paralysis and various health

authorities was followed. In studying many epidemics it has been found that the closing of schools as well as various forms of mass quarantine fail to have any effect in controlling an outbreak. So the only procedure used by your Health Department was the isolation of the patient and other family contacts under 18 years of age for a period of two weeks. It is interesting to observe the occurrence of cases and their distribution after the opening of school.

"Eleven children of school age became ill with poliomyelitis after the school opened. In only two schools, Holy Name and Central High, did more than one case occur. The two cases in Holy Name were in the same family and the second child to become ill was at home in isolation when the illness began. At Central a period of 13 days intervened between the onset of the first and second cases. It is difficult to say whether the second case acquired the infection from the first case or whether the infection was acquired elsewhere.

"One case occurred in each of the following schools: Washington, Junior High, Grant, Bethlehem, Lincoln, St. Dominic, and Longfellow.

"If these schools or grades in which cases occurred had been closed, one would have assumed that further spread of the disease had been halted by such action. However, such an assumption would have been incorrect, as no secondary cases developed when no such procedures were adopted.

"Of the thirty cases reported, three occurred in children of pre-school age, twenty-two in children of school age, and five in adults.

"Two cases ended fatally, eight made a complete recovery, and twenty are still under treatment." Wisconsin State Board of Health Bulletin, June 1947.

* * * * *

The School Child With Heart Disease,—Most teachers, because they lack up to date knowledge about heart disease in school children, are unaware of the particular needs of these children and place emphasis only on limiting their physical activity. This is unfortunate since the classroom could be used as a place to detect early evidence of rheumatic fever and of heart disease. A properly trained and observant teacher who knows the individual behavior patterns of her pupils can learn to recognize minimal signs suggestive of rheumatic fever or of childhood heart disease. This use of the classroom teacher would be a valuable service for prompt diagnosis offers the best hope for minimizing the serious effects of rheumatic fever and for preventing further damage to an already diseased heart.

There are many suggestive complaints that call for prompt medical investigations. Teachers should therefore be instructed to look for such evidence and become informed as to its possible significance. This means they must be given a clear understanding of the nature of the heart disease present, of its effects on the physical and emotional development of the child, and of the modern approach to the management of these handicapped children.

Congenital Heart Disease,—It is necessary to distinguish between the two types of heart disease seen in children of school age: (1) congenital and (2) acquired. The congenital group, i.e. those born with heart defects, constitutes roughly 10 per cent of the total school cardiac population. In general it can be said that those defects which are not accompanied by cyanosis (bluish discoloration of the skin and mucous membrane) either at rest or after exertion, call for little or no limitation of the physical activity of the affected children. Such children rarely complain of undue breathlessness or fatigue from exertion, can participate in practically all forms of active school exercises and games, and should be treated as normal individuals with the sole exception that unusually severe or sustained activities such as basketball, swimming or running meets must be avoided.

On the other hand, children with congenital heart disease who are cyanotic (i.e. blue) must lead a life of limited activity. It is usually not necessary for the teacher to restrict their activities. The children themselves refuse to participate in any but the mildest activities since they become easily tired and breathless.

Heart Diseases Acquired From Rheumatic Fever,—The problem of heart disease in school children is, however, not so much that of congenital defects, but that of the acquired variety—primarily rheumatic heart disease. In New York City, for example, 90 per cent of all heart diseases in the school age period are caused by rheumatic fever. Rheumatic fever begins usually in young children—most commonly between five and twelve years, with the highest incidence at the age of seven years. The early or initial stage of rheumatic fever very frequently does not present a clear-cut picture and is, therefore, sometimes difficult, and at times impossible, to recognize. The symptoms may be so mild or so misleading that its presence may not be suspected until evidence of heart disease is discovered later in the course of a routine medical examination.

Symptoms and Development of Rheumatic Fever,—Studies during the past decade have indicated very strongly that rheumatic fever is almost invariably preceded by an upper respiratory infec-

tion commonly known as a sore throat or cold caused by the hemolytic streptococcus germ.

The severity and the duration of each attack of rheumatic fever vary enormously. The severity varies from an overwhelming infection that kills the child within a period of a few days or weeks, to one that is so mild that it can be detected only by laboratory tests; and the duration varies from an infection that subsides within a week or two to one that lingers and smolders on for many months and even years. Regardless of the severity and the duration of the initial episode, other attacks, called recurrences, are likely to occur. Dr. Cohen and Miss Lingg in their study on the natural history of rheumatic fever found that seventy-five out of every hundred children who have an attack of rheumatic fever are likely to have a second; thirty-two, a third; twenty, a fourth; and twelve, five or more attacks. The frequency of recurrences diminishes sharply after puberty so that when the disease begins after puberty, the outlook is much brighter. This is so because the heart is always involved in rheumatic fever and because the degree of heart damage is directly related to the number of attacks of rheumatic fever. The larger the number of recurrent attacks, the more extensive the damage to the heart.

Causes of Infection,—Heredity appears to be one factor since recent studies suggest that the susceptibility or the predisposition to rheumatic fever may be inherited. This may be the explanation of the fact that rheumatic fever and rheumatic heart disease occur with high frequency in certain families. These studies have, however, by no means excluded the possibility that another factor, environmental influences, may explain the high prevalence of the disease in these families. We know that environmental conditions play an important role in the incidence of the disease. It is thus well known that rheumatic fever is more common and more severe in the temporate zone as for example, New York City; and is less common and less severe in warmer tropical and subtropical climates. Equally important is the factor of "micro-climate". This term refers to the environment within the patient's house. Experience has shown that rheumatic fever is more common in those places where the "microclimate" is poor, i.e. where the living conditions are unsatisfactory due to dampness, overcrowding, insufficient food and clothing—all well known characteristics of slums and poverty. There is good ground for believing that the factor of overcrowding by affording favorable opportunity for streptococcal infections of the respiratory tract, is one of the more important influences in increasing the rheumatic fever rate in community.

Problems for the Teacher,—How can the teacher apply the present day concepts of rheumatic fever to the best advantage to the child? The problem of the teacher resolves itself into several parts, each one of which requires a decision by the attending physician before the next one can be raised or answered: (1) Has the child rheumatic fever? It has already been indicated that the diagnosis of rheumatic fever may at times offer serious difficulties particularly so when the course of the diseass is atypical or the manifestations very mild. In such cases the lack of a specific test is most keenly felt. Lacking this aid, physicians may find is necessary to observe the child over a long period of time before coming to a definite decision. Once it has been determined that the child did have rheumatic fever, the further question arises: (2) Has the child active rheumatic infection or is the disease in the quiescent state? This question must be answered, for upon it rests the decision whether to put the child to bed or to allow restricted or even full activities. Clearly, the schools should admit only children who have completely recovered from the disease and who are in the inactive or quiescent phase. In practice, it is all too frequently impossible to give an unequivocal and decisive answer to the question of presence or absence of rheumatic infection. Finally one must know: (3) Has the child rheumatic heart disease? And if so, (4) To what extent is the heart damaged by the rheumatic infection? The answers to these questions determine not only what the child is able to do, but what he may be permitted to do.

Of the four questions, the most important is the one concerning the presence or absence of rheumatic infection. As was just stated, the decision is often not easy, since the varied manifestations of rheumatic fever and particularly its tendency to smolder or produce minor and hardly noticeable symptoms and signs render its detection difficult even for the trained medical observer. Nevertheless, because the teacher has the unique opportunity of daily contact for many hours with these children, she may be of inestimable value in the early detection of rheumatic fever. It is manifestly not practical for the teacher to count the pulse or to take the temperature of children suspected of having the disease, but she can and must look for complaints that may be significant of its presence. Thus, complaints of muscle or joint pains, or the so-called "growing pains," unexplained indisposition or fretfulness, undue fatigue, pallor, frequent nose bleeds, recurrent belly-aches may be evidence of low grade rheumatic infection. Restlessness, fidgetiness, clumsiness in an hitherto calm and well behaved child; sudden inability of a previously bright student to concentrate, or of a child

who has been a good "hand writer" to write legibly may point to a mild or undetected chorea or St. Vitus's Dance. All these symptoms become all the more significant if the child is known to have had rheumatic fever or rheumatic heart disease, or has recently recovered from a sore throat or cold, or comes from a family one or more members of which had rheumatic fever. These symptoms may or may not have significance, but that is for the attending physician to determine. The teacher has done her duty and done it well when she calls the attention of the doctor to any one of these complaints or raises the question of their possible relationship to rheumatic fever. Fortunately, only a small proportion of children manifesting these complaints will be found to suffer from rheumatic fever, but experience has shown that the more often the disease is suspected the more often will early cases be discovered. The presence of rheumatic infection is stressed since the mechanical damage to the heart caused by rheumatic infection is of secondary importance. The heart of a child has such amazing reserve power that despite the strain imposed upon it by deformed and scarred valves, it is able to function and permit the child to carry on the ordinary activities, provided there is no active rheumatic infection. The teacher must, therefore, understand that it is not the *heart murmur or heart enlargement* (evidence of the scars left by rheumatic fever) but the rheumatic fever itself that is the cause of concern. When the latter is no longer present the child should and must be regarded as a normal individual and must be encouraged to participate in the usual childhood activities exclusive of competitive games. Walking to school, climbing stairs, carrying books will not harm the rheumatic child whose infection is inactive or quiescent. Excessive protection and exaggerated fears will harm the child and convert an otherwise useful, happy and healthy child into a chronic cardiac invalid. Abstract of an article "The School Child with Heart Disease" by Charles R. Messeloff, M.D., Associate Physician and Associate Cardiologist, Hospital for Joint Diseases and Supervising Cardiologist, Department of Health, City of New York, from the "Journal of Exceptional Children", March, 1947, abstracted by David Van der Slice, M.D.

* * * * *

A New and Improved Method for Screening the Hearing of School Children*,—School health programs have, in general, failed miserably with respect to accurate detection and correction of hearing impairments. The reasons for this failure are diverse and include inadequate test equipment, complete absence of proper validating procedures and poorly motivated, untrained personnel. One of the most serious deficiencies is the fact that the hearing of

American school children is, by and large, not screened until the children have reached the third grade level. This, in spite of the fact that scholastic retardation at the primary levels constitutes one of the most serious problems in education.

About five years ago, personnel of the Massachusetts Department of Public Health set out to devise a method for screening hearing at the primary levels. Also listed as an objective, was the improvement of the techniques commonly employed in the upper grades. Our first attempts at solving the problems proved highly discouraging. Last year we were obliged to discard a test which had initially appeared promising but which ultimately proved to be sadly lacking in the required levels of reliability and validity.

We are at present working on a radically new type of test which thus far has demonstrated a continued superiority over orthodox group tests and which can be applied at the primary level as well as at the upper grades.

The new group test as given to very young children utilizes a standard puretone audiometer, an inexpensive impedance-matching unit and a standard group audiometer. The responses of the children are made in terms of crayon marks on a series of simple pictures. At the higher grade levels, the pictures are replaced with a check form.

For the first time, to our knowledge, it thus becomes possible to give groups of children in the upper grades what is essentially a puretone test.

The new test effectively triples the hearing band of orthodox group tests, all of which are based on speech stimuli. A novel element of the new test is a self-scoring feature which eliminates the tedious marking tasks heretofore associated with group screening methods. The new test may be given and the results scored at an overall rate approaching two children per minute.

It is stressed that this new test, tentatively called the Massachusetts Hearing Test, is still in the experimental stage. While the test, for the most part utilizes standard audiometric equipment, the impedance-matching units are our own design and are not generally available. A program involving several thousand Massachusetts children and directed towards ultimate validation of the test is planned for next year.

*Summary of address given by Philip W. Johnston, Ph.D., Massachusetts Department of Health, at the New England Health Institute, Durham, N. H., June 18, 1947.

How Healthy Is the College Freshman? Observations in a Midwest University,—The average college student today is heavier, has a somewhat larger chest, is better nourished and has been less damaged by communicable disease than either his father or grandfather. He has had more leisure and greater opportunities for recreation, but he is softer. He prefers his fresh air through the vents of an automobile and uses a sun lamp on his skin in lieu of sunshine.

Nerves: Students have become more and more the victims of automatically controlled environment, speed, strain, manufactured entertainment, artificiality and uncertainty. They are longing for security. They are showing the effect of the lack of housing, economic pressure and seeing the clouds of another war before the last one is hardly over. Life is tense and its scenes change with breathtaking rapidity. The stress is beginning to tell.

They are often beset by worries, harassed by fears and some are becoming psychoneurotic. Students are too frequently repeating "pick-me-ups"—cokes, smokes and coffee hours, and are engaging in excitement which accelerates the pulse and elevates the blood pressure. Escapes, mental crutches, emotional stabilizers and sedatives are being sought for relief. They want to rest and forget.

They, too, are struggling to rid themselves of the cumulative fatigue and disillusionment of the most disastrous war of history. Students have psychic wounds to be healed, spirits to be rehabilitated, and hopes to be renewed. Normal vigor must be regained and a philosophical anchor found which will hold in an anxious world. Physical, psycho-somatic, emotional and mental casualties are common.

In regard to actual physical conditions, about one per cent of the freshmen have had rheumatic fever, an acute infection involving the throat, joints and heart, often leaving the victim with an impaired heart. Thus the student may become a social and economic burden to his family or eventually a total loss to society by dying after graduation from school before giving any return on the investment made in his support and training.

The cause of rheumatic fever seems to be rather closely related to: unwholesome mental and physical environment which lowers resistance to disease; diets too low in protein and vitamins; and chronic infection, particularly of the nose, throat and intestine. To reduce the incidence of rheumatic fever it will be necessary to remove those social and environmental conditions which predispose to rheumatic fever; see that children get sufficient protein and vitamin in their daily diet; send children with chronic infections of

the mouth, nose and throat and those with "growing pains" and tender joints to a physician; emphasize the importance of parents taking every precaution to protect children with rheumatic fever against cardiac complications; and prevent those who give a history of having had rheumatic fever from engaging in strenuous exercise until an examination shows their hearts have not been damaged.

Hypertension is a common finding in college students. High blood pressure is a symptom, not a disease. Heredity, diet, use of tobacco, the ever-increasing tempo of living and the problems of life itself, are causes. The remedy seems simple: avoid smoking, reduce the intake of milk and its products, eggs and animal fats in the diet, have an occasional period of fasting, and lessen the nervous strain of existence. Length of life is generally in inverse proportion to the rate of living; the faster lived, the sooner over.

Every year a student or two show up with congenital defect of the heart. The cause of this condition is largely one of speculation. This abnormality is frequently associated with other developmental defects, notably that of mental deficiency. However, the occurrence of malformation in children of women who had a virus disease like German measles during pregnancy suggests further investigation.

Tuberculosis is a vanishing disease, but still appears in college students. When it causes death it does so on the average of three years after the student has left school. As great as has been the success in the reduction of the death rate of tuberculosis, from 5 to 15 college students in every 1,000, depending upon locality, will show some evidence of pulmonary tuberculosis.

Tuberculosis is usually contracted from someone who has the disease, either through inhaling tubercle bacilli or swallowing them in food prepared by active cases. Infection may also occur through drinking the unpasteurized milk from non-tuberculin tested cows, or ingesting insufficiently cooked non-inspected meat. Therefore, the urgent problem in tuberculosis today is to discover the sower or dispenser of bacilli, to get him under treatment in a sanatorium where he will not convey the disease to others, to examine those who have been associated with him, and to safeguard the community milk supply.

Hernia is a common finding in high school graduates. About 2 per cent have this defect, which is mainly of congenital origin. The prolonged presence of a hernia in a young adult is positive proof that either he does not understand the seriousness of his condition or his attending physician is not fully aware of the possibilities of corrective and preventive medicine.

Malnutrition is ever with us. It is found among the underprivileged, but it may also occur in the home of the well-to-do who may know no more about vitamins than about the construction of an atomic bomb. Evidences of malnutrition will continue to appear in high school graduates until each generation is taught: to avoid the wrong food; to recognize improper methods of transporting, processing and handling food; to know the effect of preparation and storage upon food value, and to appreciate that deficiencies in the soil can affect the quality of food and that soil fertility is a nutritional problem.

In conclusion, rheumatic heart disease, hypertension, congenital cardiac affections, tuberculosis, hernia and evidence of malnutrition are the far-reaching and significant findings from the medical examination of high school graduates. These conditions may shorten life, affect insurability, prove serious handicaps in the struggle for existence, create social liabilities and cause great financial loss to society.

Condensed from an address made by J. Howard Beard, M.D., Director, University of Illinois Health Center Service. From Illinois Health Messenger, June 9, 1947.

* * * * *

Rabies,—The State Department of Public Health recommends to local communities that the following points be included in programs for the eradication of rabies:

1. The licensure of all dogs within the community.
2. A pound system which implies the following:
   A. The collection and destruction of stray dogs.
   B. The isolation of suspected rabid dogs.
   C. Quarantine of animals bitten by other rabid animals.
3. Annual vaccinaion of all dogs within the community with anti-rabies vaccine.
4. Recognition that the problem of rabies control must be attacked jointly by physicians and veterinarians. From California's Health, California Dept. of Health, July 31, 1947, p. 174.

* * * * *

REVIEWS

School Health Problems. By *Laurence B. Chenoweth,* A.B., M.D., Professor of Hygiene, University of Cincinnati and *Theodore K. Selkirk,* A.B., M.D., Assistant Professor of Clinical Pediatrics, College of Medicine, University of Cincinnati; Pediatrician, Hamilton County, Ohio, Board of Health.

With an Outline on School Health Administration by *Richard Arthur Bolt,* M.D., Dr. P.H., Lecturer, School of Public Health, University of California at Berkeley, Calif; formerly Director, Cleveland Child Association and Associate in Hygiene and Preventive Medicine and in Pediatrics, Western Reserve University, Cleveland, Ohio.

F. S. Crofts & Co., New York, 1947. Third Edition. 419 pages. Price $3.00.

The first two editions of this book have been quite popular, especially as a text for students in health education and physical education. It combines the practical experience of the authors, especially in school health work with a survey of the medical and educational literature, and has been one of the most scientific books available on the subject of school health.

Good judgment has been used in the selection of the more important and practical material from the great mass of material in school health work to make it both a practical as well as a scientific text. The end of each chapter also has a careful selection of references for further study where further study of the subject material and an exploration of the field is desired. All in all, this is an excellent text as an outline of the common health practices in school.

The careful revisions made in this third edition together with the new additional material will make this text continue to be one of the popular college texts in school health.—*A. O. DeWeese, M.D.*

* * * * *

How Can We Teach About Sex?,—By Benjamin C. Gruenberg. Public Affairs Pamphlet No. 122. Paper. Price 10 cents. Pp. 31, with 7 illustrations. Public Affairs Committee, Inc., 22 E. 38th St., New York 16, 1946.

This booklet, developed by a well known authority on sex education, is a condensation in brief and readable form on what doctors and educators have concluded in relation to teaching about sex. It tells parents and educators what to do and what not to do. It contains a reading list divided according to the interests of parents and teachers, young men and women of college age, high school boys

and girls, and children. The booklet can well be recommended to interested parties, particularly parents, teachers and the discussion groups of men's, women's and civic organizations. Jour. A.M.A., June 28, 1947, p. 838.

* * * * *

BIBLIOGRAPHY

Mental Hygiene,—The School Bus and Mental Health, *Yost, N. J.*, Understanding the Child, April, 1947.

The Mental Hygiene of Classroom Teaching, *Laycock, S. R.*, Understanding the Child, April 1947.

Nutrition,— Nutrition and School Children, *Sylvestre, M.D., D.P.H.*, Canadian Journal of Public Health, April 1947.

The Principal and the School Lunch, *Prentice, M. E.*, Nations Schools, May,1947.

Physical,— Physical Therapy Aspects of Cerebral Palsy, *Bauer, Dorothy*, Public Health Nursing, May, 1947.

Give Children's Feet a Chance, *Compere, E. L., M.D.*, Hygeia, May, 1947.

Dwarfism in Healthy Children, *Talbot, N. B., M.D. and others*, New England Journal of Medicine, May 22, 1947.

School Health,— A Health Program for Preschool Children, *McCarthy, Claire* Monthly Bulletin, Indiana State Board of Health, April, 1947.

Tuberculosis,—The Preschool Child and Tuberculosis, *Myers, J. A., M.D.*, Everybody's Health, May, 1947.

Vision,—Quality Lighting in Schools, *Putnam, Russell*, Illuminating Engineering, April, 1947.

Classroom Fields of Vision, *Turner, A. S. and Brainerd, A. A.*, Illuminating Engineering, April, 1947.

Modern Trends in School Lighting, *Putnam, R. C.*, Nations Schools, May, 1947.

Classroom Lighting, *Whitcomb, Mildred*, Nations Schools, May, 1947.

* * * * *

MEETINGS

American School Health Association and the American Public Health Association, Atlantic City, October 5-9, 1947. **Headquarters, American School Health Association,** Hotel Dennis.

This year the professional program of the **School Health Association** will begin Sunday instead of Monday as formerly.